was followed, with the exception that the mixing ratio by weight of the first to second oxide was varied to 10:90, 20:80, 80:20 and 90:10, to construct batteries B1 - B4. These batteries were subsequently measured for 1C and 0.2C capacity retentions in the same manner as in Experiment 1. The results are shown in Figure 2.

In Figure 2, the results for the battery A (a ratio by weight of the first to second oxide = 50:50) used in the Experiment 1 are also shown.

The results shown in Figure 2 demonstrate that when the lithium-manganese complex oxide, i.e., the first oxide is added in the amount of 20 - 80 % by weight of the mixture, the 1C and 0.2C capacity retentions are both improved and the deterioration of load characteristics with cycling is suppressed. This is because the first oxide, when added within the above-specified range, became more effective to maintain stable contact between particles of the first oxide, and the second oxide in the form of lithium-nickel-cobalt complex oxide, during charge-discharge cycles.

EXPERIMENT 3

In this experiment 3, the respective mean particle diameters of the first and second oxides contained in the positive electrode were varied to compare performance characteristics of the resulting batteries.

During synthesis of the first and second oxides, size

reduction was effected in such a controlled fashion as to obtain positive electrode materials having mean particle diameters specified in Table 2. Otherwise, the procedure utilized in the preceding example to construct the battery A of the present invention was followed to construct batteries C1 - C8.

[TABLE 2]

Battery	Particle Diameter of First Oxide	Particle Diameter of Second Oxide
C1	15μm	2μm
C2	15μm	3μm
A	15μm	10μm
C3	15μm	15μm
C4	15μm	20μm
C5	3μm	10μm
C6	5μm	10μm
C7	30μm	10μm
C8	35μm	10μm

Then, the 1C and 0.2C capacity retentions were measured for the batteries C1 - C8 in the same manner as in the above Experiment 1. The results are shown in Figure 3. In this Figure 3, the data obtained for the battery A of the present invention prepared in the preceding Experiment A are also

shown.

As can be seen from the results shown in Figure 3, when the first oxide in the form of a lithium-manganese complex oxide has a mean particle diameter in the range of 5 - 30 μm and the second oxide in the form of a lithium-nickel-cobalt complex oxide has a mean particle diameter in the range of 3 - 15 μm, the 1C and 0.2C capacity retentions, in particular, are improved and the deterioration of load characteristics with cycling can be suppressed.

Particularly when the mean particle diameter of each complex oxide is within the above-specified range, contact between particles of the complex oxide is maintained at a higher degree of occurrence to thereby improve electronic conductivity of the cathode mix in its entirety. Also, expansion and shrinkage of each complex oxide are balanced in an effective manner. These are considered to result in the improved characteristics of the batteries C2, A, C3, C6 and C7.

From comparison of the batteries C2, A and C7 to C3 and C6, it is found preferable that the first oxide has a larger mean particle diameter than the second oxide.

The following Experiments 4 - 7 describe examples in accordance with a second aspect of the present invention.

EXPERIMENT 4

In this experiment 4, batteris were constructed using